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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Paul Lew and Jason Schiers)
Serial No.: 10/658,143)
Filed: September 9, 2003)
For: WHEEL HUB WITH)
CLUTCH)
Examiner: David D. Le)
Group Art Unit: 3681)

APPELLANTS' BRIEF

Mail Stop Appeal Brief-Patent
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

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I. REAL PARTY IN INTEREST

The appellants have assigned all right, title and interest in and to the above-identified application and invention to the MacLean Investment Partners, L.L.C., a limited liability company of Delaware having a principal place of business at 1000 Allanson Road, Mundelein, Illinois 60060.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

III. STATUS OF THE CLAIMS

Claims 1-18 were originally presented in the application. Claims 1-18 were cancelled prior to final rejection. Claim 19 was added prior to final rejection and was rejected in a Final Office Action dated January 25, 2005. The rejection of Claim 19 is currently appealed.

IV. STATUS OF AMENDMENTS

Prior to Final Rejection, Applicants filed additional Claims 20-39 via a Supplemental Amendment which was denied entry because, according to the Examiner, it was not limited to (1) a cancellation of claims, (2) adoption of the Examiner's suggestions, (3) placement of the application in condition for allowance, (4) reply to an Office requirement made after the first reply was filed, (5) correction of informalities, or (6) simplification of issues for appeal. Applicants appeal the Examiner's refusal to enter Applicants' Supplemental Amendment.

V. SUMMARY OF THE INVENTION

The invention recited in claim 19 is embodied in a hub with clutch that includes a hub body 40. Lew, Pg. 10, ll. 18-19 and Figures 3 and 4. The hub body 40 is provided with a first sleeve 49 (Lew, Pg. 11, ll. 3-19 and Figure 4), a second sleeve 41 (Lew, Pg. 10, ll. 9-13 and Figures 3 and 4), and a plurality of curved members 59 (Lew, Pg. 11, ll. 13-17 and

Figures 5, 6A-6C, and 8A-8D).

The first sleeve 49 includes an outer surface (Lew, Pg. 11, ll. 11-13) that is provided with a plurality of slots 57 (Lew, Pg. 11, ll. 11-13 and Figures 4 and 6A-6C) or 157 (Lew, Pg. 13, ln. 21 through Pg. 14, ln. 11 and Figures 8A-8D). The slots 57 are provided with a forward section 58 (Lew, Pg. 11, ll. 13-17 and Figures 6A-6C) or 158 (Lew, Pg. 14, ll. 3-6 and Figures 8A-8D), a tapered section, and an outwardly sloping surface 58a or 158a that extends from the forward section 58, 158 to the tapered section (Lew, Pg. 11, ll. 13-17 and Figures 6A-6C and 8A-8D).

The second sleeve 41 includes a wall 62 or 162 that includes a plurality of steps 63, 163a, 163b, 163c, or 163d. Lew, Pg. 11, ln. 20 through Pg. 12, ln. 6, Pg. 13, ln. 21 through Pg. 14, ln. 11, and Figures 4, 6A-6C, and 8A-8D.

The curved members 59 travel from the forward section 58, 158 along the outwardly sloping section 58a, 158a toward the tapered section, whereat the curved members 59 contact the steps 63 and transfer torque between the first sleeve 49 and the second sleeve 41. Lew, Pg. 11, ll. 13-19, Pg. 12, ll. 7-23 and Figures 6A-6C and 8A-8D.

VI. ISSUES

Whether the originally disclosed “ball bearings” inherently disclosed curved surfaces with the result that Applicants’ Amendment of August 23, 2004 did not introduce new matter into the Application and therefore should not have been denied entry?

Whether the “curved member” recited in Claim 19 was sufficiently described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention?

Whether Claim 19 is patentable under 35 U.S.C. § 102(b) over Vogt, U.S. Patent No. 3,432,016?

Whether Claims 20-39 are patentable under 35 U.S.C. § 102(b) over Vogt, U.S. Patent No. 3,432,016 and therefore placed the application in condition for allowance?

VII. GROUPING OF CLAIMS

Because Applicants' Supplemental Amendment was denied entry, Claim 19 is the only claim pending.

VIII. ARGUMENT

The Examiner rejected Claim 19 under § 102(b) as anticipated by Vogt, U.S. Patent No. 3,432,016 (hereinafter referred to as "Vogt") and refused to enter Claims 20-39 of Applicants' Supplemental Amendment. The Examiner also refused to enter Applicants' Amendment of August 23, 2004 on grounds that it introduced new matter. However, the Amendment of August 23, 2004 simply made more explicit what was already inherently disclosed, and therefore, the Amendment of August 23, 2004 did not introduce new matter into the specification. See M.P.E.P. § 2163.07(a). Furthermore, Vogt does not teach all the limitations of Claim 19, and therefore, Claim 19 should have been allowed. Finally, Applicants' Supplemental Amendment presented new Claims 20-39 that are not anticipated by Vogt, and, as such, placed the Application in condition for allowance; it was error for the Examiner to refuse to enter Applicants' Supplemental Amendment.

A. Applicants' Amendment of August 23, 2004 Did Not Introduce New Matter Into the Application, and Therefore, the Amendment Should Have Been Entered and Claim 19 Allowed.

The Examiner refused entry of Applicants' Amendment of August 23, 2004 on the grounds that "it introduces new matter into the disclosure" and then rejected Claim 19 on the grounds that the claim contained "subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention."

Final Office Action, ¶ 8 (citing 35 U.S.C. § 112, First Paragraph). According to the Examiner, “[t]he added material, which is not supported by the original disclosure, is, for example, the **Curved member(s)** as supposed [sic] to the originally disclosed **ball bearing(s)**.” Action at p. 3 (emphasis in original). However, on its face, referring to the spherical “ball bearings” as “curved members” does not represent the introduction of prohibited new matter.

Applicants’ change from “ball bearing” to “curved member” merely makes explicit the curved nature of the spherical ball bearings that were originally disclosed. The M.P.E.P. § 2163.07(a) states that “[b]y disclosing in a patent application a device that inherently performs a function or has a property, operates according to a theory or has an advantage, a patent application necessarily discloses that function, theory or advantage, even though it says nothing explicit concerning it. The application may later be amended to recite the function, theory or advantage without introducing prohibited new matter.” The properties of the originally disclosed “ball bearing” include having a curved outer surface. Consequently, Applicants’ amendment, wherein “ball bearing” was changed to “curved member,” does not represent the introduction of prohibited new matter. As a result, Applicants’ amendment of August 23, 2004 should have been entered and sufficient disclosure supported Claim 19 to comply with 35 U.S.C. § 112, First Paragraph.

B. Claim 19 Is Sufficiently Clear and Definite and Therefore Complies With 35 U.S.C. § 112, Second Paragraph.

Claim 19 defines patentable subject matter with a reasonable degree of certainty and therefore should have been allowed. According to the M.P.E.P., an Examiner “should allow claims which define the patentable subject matter with a reasonable degree of particularity and distinctness.” M.P.E.P. § 2173.02 (emphasis in original). In this regard, Applicants’ note that the Examiner’s concerns regarding § 112, Second Paragraph were occasioned by

the Examiner's refusal to enter Applicants' Amendment of August 23, 2004 which provided antecedent basis in the specification disclosure for the claim terms that the Examiner found unclear, as the following marked up portion of the Amendment of August 23, 2004 illustrates:

“Each ~~pocket~~ slot 57 has a forward ~~pocket~~ section 58 formed to seat a ~~ball~~ bearing curved members 59 therein and tapers upwardly from the forward ~~pocket~~ section 58 as a track 58a that the ~~ball~~ bearing curved members 59 will roll along from forward ~~pocket~~ section 58. So arranged, the ~~ball~~ bearing curved members 59 will travel outwardly along the track 58a, when the thick ring 56 is turned in a clock-wise direction.

See Amendment of August 23, 2004, p. 11, ll. 15-20. Claim language such as “forward section” is sufficiently clear, and any § 112, Second Paragraph issue resulted from the Examiner's improper refusal to enter Applicants' Amendment.

Putting that issue to one side, however, “[t]here is no requirement that the words in a claim must match those used in the specification disclosure.” M.P.E.P. § 2173.05(e). As a result, it is entirely permissible under § 112, Second Paragraph for the specification to refer to “a forward pocket section 58” while the claim recites “a forward section.” Similarly, claim language reciting “an outwardly sloping surface extending from the forward section” is not statutorily prohibited when the specification describes “sloping tracks 58a” that “taper upwardly from the forward pocket section 58” and the figures show the “sloping tracks 58a” radiating outwardly. Therefore, Applicants respectfully submit that Claim 19 conforms to the requirements of 35 U.S.C. § 112, Second Paragraph, and it was error for the Examiner to reject the claim on this basis.

C. Claim 19 Is Not Anticipated and Therefore Should Not Have Been Rejected Under Section 102(b).

Claim 19 was rejected under 35 U.S.C. § 102(b) as anticipated by Vogt. However, because Vogt does not teach all the limitations of Claim 19, the rejection under 35 U.S.C. § 102(b) should be withdrawn. For anticipation under 35 U.S.C. § 102, the reference must teach every aspect of the claimed invention. M.P.E.P. § 706.02. A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” M.P.E.P. § 2131 (citing *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)). “The identical invention must be shown in as complete detail as is contained in the ... claims.” M.P.E.P. § 2131 (citing *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989)).

Citing Vogt, the Examiner considered and rejected Claim 19 which states as follows:

- a) a hub body including a first sleeve and a second sleeve;
- b) the first sleeve includes an outer surface that includes a plurality of slots, wherein said slots are provided with a forward section, a tapered section, and a outwardly sloping surface extending from the forward section to the tapered section;
- c) the second sleeve includes a wall that includes a plurality of steps; and
- d) a plurality of curved members, wherein said curved members travel from the forward section along the outwardly sloping surface toward the tapered section, whereat the curved members contact the steps and transfer torque between the

first sleeve and the second sleeve

However, Vogt “relates to a free wheel coupling device for timepieces.” Vogt, Col. 1, ll. 24-26. Not surprisingly, Vogt is not analogous art to a clutch for use with a wheel; accordingly, Vogt does not teach and cannot be combined with any of the Examiner’s cited references to teach all of the limitations of Claim 19. See M.P.E.P. § 2141.01(a). Claim 19 recites a “hub body,” and Vogt, directed to a “timepiece,” simply does not teach a “hub body” and could not be combined with any cited reference to the extent that such a reference discloses a hub body. For at least this reason, Vogt does not anticipate Claim 19 and the 35 U.S.C. § 102(b) rejection thereof should be reversed.

D. Claims 20-39 of Applicants’ Supplemental Amendment are Allowable Because Vogt Does Not Teach All the Limitations of the Claims; Consequently, Applicants’ Supplemental Amendment Placed the Application in Condition for Allowance and Should Have Been Entered.

Claims 20-39 of Applicants’ Supplemental Amendment were denied entry simply because they supplemented a previous amendment. However, these claims contain limitations that distinguish over Vogt and hence are clearly allowable; as such, Claims 20-39 placed the Application in condition for allowance. For this reason, the Examiner should have entered the Supplemental Amendment. See 37 C.F.R. § 1.111(a)(2)(C).

Claims 20-39 recite limitations that distinguish the claims from the timepiece disclosed in Vogt. Claim 20 of the Supplemental Amendment recites “a hub including a sleeve” that “is configured to accommodate at least one gear,” as well as “a ring, and a hub body” that “includes a first flange, a second flange, and a wall, wherein the wall is located within the hub body.” Plainly, the timepiece of Vogt teaches none of these limitations. Because Claims 21-26 all depend from Claim 20, they are allowable for at least the same reason Claim 20 is allowable.

Independent Claim 27 of the Supplemental Amendment recites a hub including a sleeve that carries a gear, a ring, and a hub body that includes a first flange, a second flange, and a wall located within the hub body. The timepiece of Vogt plainly does not teach these limitations and, as non-analogous art, Vogt cannot be combined with any reference that could cure its shortcomings. Because Claims 28-33 all depend from Claim 27, they are allowable for the at least the same reason Claim 27 is allowable.

Independent Claim 34 of the Supplemental Amendment recites a hub including a sleeve that accommodates a gear, a ring, a hub body with a hub opening, and an axle that passes through the hub opening. Obviously, the timepiece of Vogt does not teach an “axle.” To the extent other references teach an axle, one skilled in the art would not be motivated to combine a watch with an axle. Consequently, Claim 34 is allowable as are dependent Claims 35-39.

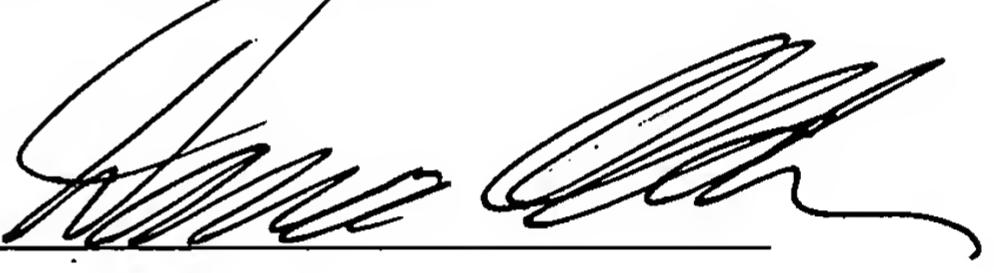
As the foregoing demonstrates, even a cursory review of the independent claims of the Supplemental Amendment reveals that the amendment placed the Application in condition for allowance and therefore should have been entered.

IX. CONCLUSION

In view of all of the above, it is believed that Applicants' Amendment of August 23, 2004 did not present new matter, that Claim 19 is allowable, and that Applicants' Supplemental Amendment should have been entered. It is therefore respectfully requested that the refusal to enter Applicants' Supplemental Amendment, Applicants' Amendment of August 23, 2004, and the rejection of Claim 19 be reversed and that the present application issue as early as possible.

Dated: October 25, 2005

Respectfully Submitted,

By: 

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APPENDIX

CLAIMS

Claim 19:

A hub with clutch comprising:

- a) a hub body including a first sleeve and a second sleeve;
- b) the first sleeve includes an outer surface that includes a plurality of slots, wherein said slots are provided with a forward section, a tapered section, and a outwardly sloping surface extending from the forward section to the tapered section;
- c) the second sleeve includes a wall that includes a plurality of steps; and
- d) a plurality of curved members, wherein said curved members travel from the forward section along the outwardly sloping surface toward the tapered section, whereat the curved members contact the steps and transfer torque between the first sleeve and the second sleeve.

Claim 20

A hub with clutch comprising:

- e) a hub including a sleeve, a ring, and a hub body;
- f) the sleeve is configured to accommodate at least one gear and transfer torque;
- g) the ring at least in part contacts the sleeve and is provided with a plurality of slots that are shaped to accept a curved member;
- h) the hub body includes a first flange, a second flange, and a wall, wherein the wall is located within the hub body; and

- i) the curved member is located at least in part within one of the slots and is provided with a curved surface that is shaped to rotate and engage the wall of the hub body, whereby the ring and the curved member link the sleeve and the wall of the hub body.

Claim 21

The hub according to claim 20 wherein the ring and the curved member cooperate to transfer torque between the sleeve and the hub body.

Claim 22

The hub according to claim 20 wherein the sleeve includes an axle sleeve and a gear spline sleeve.

Claim 23

The hub according to claim 20 wherein the sleeve is provided with an outer surface that includes a plurality of spaced bars.

Claim 24

The hub according to claim 20 wherein the first flange and the second flange each define a plurality of flange holes.

Claim 25

The hub according to claim 20 further comprising a wheel wherein the hub body supports the wheel.

Claim 26

The hub according to claim 20 further comprising:

- a) a sleeve opening defined by the sleeve;
- b) a ring opening defined by the ring;
- c) a hub body opening defined by the hub body; and
- d) an axle that passes through the sleeve opening, the ring opening, and the hub body opening.

Claim 27

A hub with clutch comprising:

- a) a hub including a sleeve, a ring, and a hub body;
- b) the ring at least in part contacts the sleeve and is provided with a plurality of slots that are shaped to accept a curved member;
- c) the hub body includes a first flange, a second flange, and a wall, wherein the wall is located within the hub body;
- d) the curved member is located at least in part within one of the slots and is provided with a curved surface that is shaped to rotate; and
- e) the sleeve carries at least one gear and is configured to move the curved member to a rotated position, whereby the curved member engages the wall of the hub body and transfers torque from the sleeve to the hub body.

Claim 28

The hub according to claim 27 wherein the curved member is configured to occupy an un-rotated position whereby the hub body free-wheels relative to the gear.

Claim 29

The hub according to claim 27 wherein the sleeve is provided with an outer surface that includes a plurality of spaced bars.

Claim 30

The hub according to claim 27 wherein the sleeve includes an axle sleeve and a gear spline sleeve.

Claim 31

The hub according to claim 27 wherein the first flange and the second flange each define a plurality of flange holes.

Claim 32

The hub according to claim 27 further comprising:

- a) a sleeve opening defined by the sleeve;
- b) a ring opening defined by the ring;
- c) a hub body opening defined by the hub body; and
- d) an axle that passes through the sleeve opening, the ring opening, and the hub body opening.

Claim 33

The hub according to claim 27 further comprising a wheel, wherein the hub body supports the wheel.

- a) a sleeve opening defined by the sleeve;
- b) a ring opening defined by the ring;
- c) a hub body opening defined by the hub body; and
- d) an axle that passes through the sleeve opening, the ring opening, and the hub body opening.

Claim 34

A hub with clutch comprising:

- a) a hub including a sleeve defining a sleeve opening, a ring defining a ring opening, and a hub body defining a hub body opening;
- b) the sleeve is configured to transfer torque and is provided with an outer surface that accommodates at least one gear;
- c) the ring at least in part contacts the sleeve and is provided with a plurality of slots that are shaped to accept a curved member;
- d) the hub body includes a first flange, a second flange, and a wall, wherein the wall is located within the hub body;
- e) the curved member is located at least in part within one of the slots and is provided with a curved surface that is shaped to rotate and engage the wall of the hub body, whereby the ring and the curved member cooperate to transfer torque between the sleeve and the hub body; and

- f) an axle that passes through the sleeve opening, the ring opening, and the hub body opening.

Claim 35

The hub according to claim 34 wherein the sleeve is provided with an outer surface that includes a plurality of spaced bars that project outward from a portion of the outer surface and are shaped according to the gear opening.

Claim 36

The hub according to claim 34 wherein the sleeve includes an axle sleeve and a gear spline sleeve.

Claim 37

The hub according to claim 34 wherein the first flange and the second flange each define a plurality of flange holes.

Claim 38

The hub according to claim 34 wherein the gear defines a gear opening that is located around a portion of the outer surface of the sleeve.

Claim 39

The hub according to claim 34 further comprising a wheel, wherein the hub body supports the wheel.